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AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

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For the American Farmer.

MR. SHRIVER'S LARGE CROP OF CORN.

Mr. Editor,—The large crop of corn raised last season by Augustus Shriver, Esq., has given rise in our neighborhood to no little inquiry as to the distance proper to be observed in planting, to effect the devoutly to be wished for object of 100 bushels per acre. The usual distance observed by us is 3½ feet each way. There are many experienced farmers among us who object to that distance as being too close for a full maturity of the ear. The above distance will produce 3555 hills per acre, assuming the calculation of 120 ears to the bushel, of 12 inches long and 7 inches in circumference; which is considered correct by many, and indeed by taking the internal dimensions of a bushel in inches, and making proper allowance for heaping, by computation, seems to be about correct. Agreeably to the above calculation, allowing 2 stalks in each hill, we have 60 bushels of ears, or 6 barrels of corn per acre. Mr. Shriver's produce was 20 barrels per acre, making 24,000 stalks; allowing each stalk to have produced one ear 12 inches long and 7 inches in circumference. Mr. S.'s field must have been covered at the rate of one stalk 16 inches apart each way. But as Mr. S. worked his corn with a horse and cultivator, he must have planted not less than 3 feet one way, and if so, with 2 stalks in the hill, the hills must have been 14 inches distant. If 3 stalks in the hill, the hills must have been 22 inches apart.

Now as Mr. Shriver is a subscriber to your valuable paper, an enterprising farmer, and a gentleman I am happy to be informed of most excellent feelings, and as this will likely fall under his eye, I take the liberty of asking him, to inform us through the medium of your paper, the exact distance he observed in planting, and the number of stalks in the hill. My impression is, that Mr. S.'s corn will exhibit much closer planting than the above calculation indicates. If so, it may enable us to determine with some accuracy how much of Mr. S.'s crop was lost by too close planting, in the want of the full maturity in the size of the ear. And also satisfy our farmers, that, to expect a great yield of corn per acre, we must greatly shorten the distance we have heretofore observed in planting.

A SUBSCRIBER.

Near Ellicott's Mills, Baltimore Co. Md.

For the American Farmer.

COMPARATIVE VALUE OF BALTIMORE AND FREDERICK LANDS.

The value of the neglected lands in the vicinity of Baltimore contrasted with the Frederick County lands.

Why are the lands in the vicinity of Baltimore so neglected? To this question I have never been able to get a satisfactory answer. The inquiry is worthy reflection. There are at this time within five miles of the limits of our city, thousands of acres of land which have never been disturbed by the ploughshare. There must be some real or imaginary cause for this. I have heard it attributed to poverty—"give a dog a bad name, you had as well kill him at once." If this be the cause, I must say it is imaginary, and I hope to prove it before I close this communication. If by poverty is meant its unproductiveness and want of recuperative powers, never were judges more deceived.

A few facts are worth a thousand theories. It is necessary for my purpose, to locate myself in some particular section of the surrounding country—I shall therefore choose the west, as that point of the compass has become almost synonymous with prosperity. A dozen years have scarcely elapsed, since almost the entire country bordering on the Liberty and Windsor Mill roads for five or six miles distant, gave the slightest indication of cultivation.

Occasionally here and there was to be seen a small tenement surrounded with a patch of half tilled land, bearing all the marks of poverty, and ever and anon an old field, or commons, half a century or more ago, killed by the repeated culture of corn and tobacco: leaving upon the surface the evidence of the hoe, in small hillocks, which had doubtless borne to their owners the last return which ill treatment could force from them. Some few enterprising gentlemen had the fortitude, I might say hardihood, to venture an investment in portions of these lands, worn out, and as was supposed, forever dead. These investments were made within the last few years. And now may be seen for near two miles, field upon field well enclosed, bearing all the evidence of the highest state of cultivation. Yet there are hundreds of acres, uncultivated and uncultivated.

I will cite a single instance of very recent improvement made by Mr. Jos. Pearson, of some old fields. These lands had been permitted to grow up with briars, a desolate waste, a range for half starved town cows, nurseries for blackberries, and harbors for vicious youths to desecrate the Sabbath. Adjoining were similar lands now under the cultivation of Messrs. Cheston, Morris, and Gittings.

These lands have been restored to their present high state of productiveness, by a small expenditure of money, and had they been in the hands of practical farmers, might have been improved at much less cost.

There is now, unemployed, a tract of land belonging to the heirs of Mr. Carroll, adjoining the farms of Messrs. Pearson & Dalrymple. This land some fifteen or twenty years since was shorn of its timber, has never been grubbed, and has now a growth of bushes sufficient to burn five times the oyster shell lime necessary to put it in order. It is a public common. I have selected this tract, by way of instituting a comparison between the value of these lands in the hands of practical farmers, with those of the best Frederick County lands. I submit for the consideration of your readers the following statement of cost and product:

Price at which I suppose the Carroll tract could be bought, per acre,	Cost of best Fred'k Co. Lands, per acre,
\$40.00	\$100.00
Cost of 150 bushels oyster shells, delivered on the land at 31 c. per bush.	4.50
Cost of burning, 1.00	
Grubbing, per acre, 5.00	
5 tons manure, deliv'd on the ground, at \$2 p. ton, 10.00	
2 years' interest, 7.26	
Whole cost of the land improved, per acre, \$67.26	\$100.00
The following exhibits the average product of both lands, taking one acre of each variety of produce:	
THE CARROLL TRACT.	FREDERICK COUNTY LAND.
1 acre Rye, 20 bush. at 60 cents per bushel, \$12.00	1 acre Wheat, 20 bush. at \$1 per bushel, \$20.00
The straw from do. 28.00	1 acre Corn, 75 bush. at 40 c. per bushel, 30.00
1 acre Corn, 50 bush. at 50 cents per bushel, 25.00	1 acre Potatoes, 150 bush. at 15 cts. per bushel, 22.50
Fodder and husks, 6.00	
1 acre Potatoes, 200 bush. at 30 cts. per bush. \$60.00	
Less 5 additional tons manure, 10.00	
	50.00
1 acre Timothy, 2 tons, at \$12 per ton, 24.00	
	\$145.00
Deduct one ton manure for each ton straw, hay, &c. sold off the land, 5 tons, at \$2 per ton, 10.00	
	\$135.00
	\$72.50

I have taken 4 acres of each land, the profits exhibit in favor of the Baltimore County land is nearly 100 per cent. and the original cost of the land is little more than one-half.

If any doubts are entertained as to the overrated products of this land, I can only refer such to the adjacent farms. In 1840 a 12 acre field not more than 100 yards distant yielded 25 bushels wheat per acre—an adjoining farm last season yielded 37 bushels rye per acre, and of 50 acres of corn raised on the three farms adjoining it, produced over 10 barrels per acre last season. I have valued the produce on the land. The writer of this has farmed land in both Frederick and Baltimore counties, and can speak with certainty as to the product of each. I regard 100 bushels of oyster shell lime and 5 tons good manure sufficient to bring this land at once into good cultivation. Experience has taught us that lime of this kind is much quicker in its action on the land than stone lime. I have taken this tract of Carroll's, because it adjoins lands recently improved in the same manner I propose. I do not know that it is for sale. If it will be agreeable to you, I shall take the liberty of reporting various experiments made on land in this vicinity in a future communication.

A FARMER.

From the Albany Cultivator.

THE CARROT.

Messrs. Gaylord & Tucker—The improvements in the ancient and honorable art of agriculture in New England, within the last quarter of a century, are truly obvious, and particularly for the last few years it has become a subject of interesting contemplation to every lover of his country.

Though the writer is desirous to contribute his mite to the laudable object of the pursuit of agriculture, it is because it is so intimately connected with the interest and well being of his country and the community. Within the last few years the cultivation of the carrot has engrossed a greater share of his attention than that of any other vegetable. If then the few ideas which are hastily thrown together upon this subject, shall ultimately lead to the best method of cultivating this valuable and nutritious root, he will be richly rewarded for whatever pains he may have taken in observing and superintending its growth. We are satisfied from experience that this plant may be brought to great perfection in any part of New England, and with suitable attention will abundantly remunerate the husbandman for all his necessary care and labor. Were our farmers who keep a large stock, to devote a spare acre to the cultivation of this root, we make no doubt they will at the harvest, find themselves in possession of a large store of feed, of valuable and rare qualities for sheep, horses and cattle, which will save largely of hay and other fodder, in times of scarcity of such crops. The three varieties of carrot that constitute the subject of these observations, are the long yellow, the large field, and the Altringham white. Scarcely any vegetable during its growth presents a richer appearance than the carrot, whether we contemplate the young plant or the mature root. Hence it may be said in truth, to be an ornamental as well as profitable crop.

For the table, the long yellow is preferable. Its surface is smooth and fibre very compact. In proportion to its size, it doubtless yields the greatest amount of nutriment. Next to this is the large field variety, on which the horse feeds and thrives well, and it gives to the hair a peculiar smooth and glossy appearance. This root is short and rough, often sending off large radicles or branches of roots. When it grows luxuriantly, it is frequently hollow at the upper part. It yields a larger crop than the former, but is better adapted to stock than the table.

The Altringham white is a long beautiful root, much less nutritious than either of the other varieties, and resembles some of the finest specimens of the long white turnip. It is a hardy plant, requiring less care in its cultivation than the other varieties. Stock feed and thrive well upon it.

The soil best adapted to the carrot, is a deep rich loam, free from gravel or sand. If it be too adhesive or lumpy, ashes or lime may be mixed with it. If manure be used, it should be entirely decomposed or rotted, and intimately mixed with the earth. The ground should be plowed or spaded fine and deep, the whole being made mellow.

The seed should be planted early in April, in drills not less than 22 inches apart. When the plants spring up, they should be early freed from weeds and the earth loosened around them. The feeble plants should be pulled, leaving only the most hardy ones. At the second weeding they should be thinned again, leaving the most healthy to grow, and thus continue, leaving the most thrifty ones not less than 20 inches apart, so as to give large room for the tops. In this manner, the writer has raised the yellow carrot no less than seven inches through, and at the rate probably of 600 or 700 bushels to the acre.

Middletown, Ct. Dec. 23, 1843.

We can bear testimony to the value of Carrots as food for every kind of stock. We have fed them to milch cows with the happiest effects—to hogs—and to horses, as an alternative, we know of nothing half so valuable.—*Ed. Amer. Farmer.*

WILL POTATOES MAKE MILCH COWS POOR.

Mr. Editor—I noticed in the Ploughman of Dec. 22d, in a communication from your correspondent "Cui," the following statement: "Potatoes will make a milch cow grow poor." And in your remarks following, you say nothing about it, thus tacitly giving assent. I would like to know if it is indeed so? What means then the hue and cry we heard but a short time ago, "roots for stock"; "roots for stock"? Were all our wise heads mistaken about this, and into of them still in ignorance, blindly leading the blind some of the ditch? Are roots, or any one kind of roots commonly given to stock, really of no benefit; nay, worse than that, a positive injury?

One fact and I have done. I have a small dairy of four or five cows: they are, and have been for many winters past, kept principally on meadow hay, (of which your correspondent speaks very slightly,) with other coarse fodder and about a peck of potatoes, carrots or turnips to each cow per day. It is a fact they are not poor, notwithstanding they eat potatoes. It is a fact, too, that by using the thermometer and churning the cream at a proper temperature, that no witches ever trouble; the butter is not obstinate and "wont come." And it is a fact too that the butter is abundantly fit to eat when "it has come."

Mass. Ploughman.

S. F. P.

It is a very prevalent notion that milch cows will not gain flesh on potatoes: many think they grow poor by eating them. But what then? They give out more milk, and we continue to give them. Does any one doubt that cows will be poorer in the spring for being milked through the winter, instead of going dry for four months? Yet we milk them.

There is much difference in cows in this respect. Some will convert their potatoes to milk, and some will convert but a part of it, and the rest goes to sustain, or to fatten the cow. But suppose that all cows become poorer for eating potatoes while in milk, it by no means follows that we suffer a loss by giving them potatoes.—*Ed.*

From the Central New York Farmer.

HUSSEY'S CORN AND COB GRINDER.

A mill by which the farmer could grind corn and corn, as well as other grain for his stock, has been wanted. Such a machine can now be obtained, and we take great pleasure in having it in our power to recommend, from eleven months experience, the one invented by Mr. Abell Hussey, of Baltimore, and exhibited by him at the Fair of the N. Y. State Agricultural Society, held at Albany in September, 1842, for which he was awarded the first premium. It is as simple in construction as a grindstone; upon a horizontal shaft a cast iron grooved plate is placed, in which by means of nuts and screws, steel cutters are secured, for the purpose of cutting the cobs, working against another grooved plate, which is stationary, being screwed to cast iron flanges fastened to the frame.

Both of these plates, (the grinders,) when worn out, can

be displaced, and new ones substituted, at an expense of one dollar and fifty cents per pair; and can be taken off and adjusted by any mechanic of ordinary ingenuity. It occupies about three feet square on the floor, weighs about 275 pounds, and is intended for horse or water power. The band wheel on the shaft, is fifteen inches in diameter, a size intended to reduce the motion sufficiently when driven directly from the drum or driving wheel of an ordinary power, used for threshing machines. By means of a screw and a hand nut at the end of the shaft, it can be set to grind coarse or fine, at pleasure.

The corn is fed into a tube, one ear at a time, the feed graduated by the driving power, as it will take feed according to the power applied. "It is capable of reducing," says Mr. Hussey, with two to four horses, from six to ten bushels of corn and cob, per hour, and it has ground six bushels per hour with one horse, but he was a strong and powerful animal."

The one we have is driven by an overshot water wheel, six feet four inches in diameter, buckets three feet long, and geared so that we get about 300 revolutions per minute. The water is conducted on to the wheel through a tube ten inches square and fifty feet long, which discharges nearly double the quantity the buckets will receive. With this power, we can grind from four to six bushels of corn and cob per hour. After mixing the meal with oats and setting the grinders closer, we have run through it six bushels per hour, reducing it as fine as shorts. It grinds oats better than any mill we have tried, and they have not been few. By attaching a hopper, so that the feeding can be regulated, all kinds of grain may be ground suitable for stock, with ease, and we can confidently recommend it as being a very useful and efficient mill for all the purposes intended.

The whole is a workmanlike manner of good materials, and put together in a substantial manner. They are manufactured in Baltimore, Md., by O. Hussey, the patentee.

CABBAGE AS FOOD FOR HOGS.—A gentleman remarked in our hearing a few days since, that cabbage was a valuable food for hogs. The idea was new to us, and we inquired the manner of feeding. In reply, he gave us the following as the result of his experience the last summer.—Having a fine patch of plants and observing the bottom leaves beginning to decay, he directed his farmer to procure a water-tight cask, and gather a bushel of the lower leaves from the cabbage plants and deposit them in the barrel, with a handful of salt and one quart of corn meal. On this was poured the contents of the swill-pail, and the whole was suffered to stand undisturbed for 24 hours when the process was repeated, with the exception of the salt—and so every day, until the cask was filled with a mass of wilted leaves, about six quarts of corn meal, potato peelings, crumbs of bread, &c., from the kitchen; all in a state of partial fermentation. He now commenced feeding it to the hogs, and they eat with greediness, leaving other food for this. They were evidently as fond of this kind of mush as 'Mynheer' was of sour-kraut.

While the hogs were consuming the contents of the first barrel, a second was in course of being filled, and so alternately, till the stock of leaves were exhausted, which was about four weeks.

This gentleman gave his opinion, that he could not have prepared any other kind of food for his hogs, known to him, at double the expense, that would have produced results so beneficial. An increase of appetite, improvement in their general appearance, and better heart was the result of this method.

The cabbages he thinks, were greatly improved by plucking the redundant foliage; and he intends to plant a large patch of cabbages the coming season, more fully to test the advantages of this kind of food for hogs. We invite him and others who may experiment in the business, to give us the results for publication.—*Far. Cab.*

INDIGO IN LOUISIANA.—The editor of the Baton Rouge Advocate has had a box of indigo presented to him, raised in the parish of West Baton Rouge, Louisiana. Accompanying the indigo, the editor received a communication, from which the following is extracted:

The article has been pronounced by competent judges as being inferior to the best Caraccas indigo, selling at \$2 per pound. He says: "One acre of ground, well cultivated in West Baton Rouge, will yield from forty to sixty pounds; that it requires only from July until October for cultivating it; that there is not connected with it one-third of the expense of time that is generally required for the

cultivation of cotton." He therefore intends in future to turn his attention to the cultivation of indigo in preference to cotton.

DESTRUCTION OF INSECTS BY ARTIFICIAL MEANS.

The following is an extract from an article in the British Farmers' Magazine, by C. W. Johnson.

Various have been the successful recipes suggested for the destruction of the insects which destroy the cultivator's crops: thus *ants*, it is said, may be easily destroyed by toasting the fleshy side of the outside skin of a piece of bacon till it is crisp, and laying it at the root or stem or any fruit tree that is infected by these insects—put something over the bacon to keep it dry; the ants will go under; after a time lift it up *quickly* and dip it into a pail of water. For the destruction of slugs, warm in an oven, or before the fire, a quantity of cabbage leaves until they are soft, then rub them with unsalted butter, or any kind of fresh dripping, and lay them in the places infected by slugs. In a few hours the leaves will be found covered with snails and slugs; this plan has been successfully tried by Mr. Loudon at Bayswater. Earwigs and woodlice are destroyed in the same way. For field operations, perhaps, the best means of destroying slugs and worms is common salt, an agent too little known for this purpose, yet its powers are undoubted.

No person has employed common salt for the purpose of destroying worms, to a greater extent than Jacob Busk, Esq., of Ponsbourn Park, in Hertfordshire. His valuable experiments extended over some hundreds of acres of wheat. To use his own words—"In every situation, and at every time, the effect appeared equally beneficial." The quantity per acre—"about four or five bushels sown out of a common seed-shuttle." The period—"In the evening." The effect—"In the morning each throw may be distinguished by the quantity of slime and number of dead slugs lying on the ground. In some fields it has certainly been the means of preventing the destruction of the whole crop." Six bushels of salt per acre were applied by hand, in April, 1828, to a field of oats attacked by the slugs and worms, on the farm of Mr. John Slater of Draycote, near Oxford. The crop was completely saved by this application, although an adjoining field, *not salted*, was completely destroyed by this sort of vermin.

Salt, too, is a complete prevention of the ravages of the weevil in corn. It has been successfully employed in the proportion of a pint of salt to a barrel of wheat.

The black and green fly may be killed by the point of the young shoots of plants infected with them into a thin cream, composed of stiff yellow clay mixed with water; the clay will, it is true, look dirty upon the trees for a few days, but the first shower of rain washes it off, and the shoots will look more healthy than before the application; "there is no fear," says Mr. Loudon, "of the return of the insects that season." The scale in pines may be destroyed by the same mixture. The bug (*Aphis lanigera*) upon fruit trees may be killed by the use of the same clay and water, made as thin as white wash, and mixing with every 6 gallons of it 2 lbs. of cream of tartar, 1 lb. of soft soap, and half a peck of quick lime. "When you think," adds Mr. Loudon, "that the weather is likely to continue dry for some time, take a bucketful of this mixture, and with a large brush wash over the bark of the trees, wherever you think it has been infected with the bug. A man will dress a number of trees over in a few days with a white-wash brush and this liquid; it is only necessary to be careful to do it in dry weather so that the rain may not wash over the mixture for some time. *Flies and wasps*. A mixture of pepper, sugar and water, will speedily attract and destroy them. (Gard. Mag. No. 37; Quart. Jour. Agr. vol. iii. p. 1071.) *Moss and insects*. Mr. Thomas recommends that the trees infected should be sprinkled with a fine powder in March, and again in October, on a foggy day when the trees are damp but not dripping, and I have no doubt of its efficacy. The powder may be composed as follows: slack five bushels of lime, hot from the kiln, with common salt and water (say 1 lb. of salt to each gallon of water.) When the lime has fallen to a fine powder, add, by small quantities at a time, a bushel of soot, stirring it until it is completely incorporated. Mr. Thomas has found that one man can dust over with the powder fifty trees in a day, and that the moss in the turf, under fruit trees thus treated, is also completely destroyed by the application. (Trans. Soc. Arts.) *Worms in grass plots* may be readily destroyed by copiously watering the turf

with lime water (half a pound of the hottest quick lime well stirred in each gallon of water,) or by sprinkling common salt (20 bushels per acre) over it, or by strewing it on gravel walks in rather larger proportions. Lime is recommended for the destruction of the worm which sometimes injures young larch plantations, by Mr. Menzies (Com. Board of Agr. vol. vi. p. 163;) coal tar and tar water, to preserve hop poles and other wood from the ravages of insects. (Ibid. p. 166.) The caterpillars on cabbage may be readily destroyed by sprinkling them with fine powdered lime; and when, some years since, a black caterpillar attacked very generally and extensively the turnips, in some instances they were very successfully destroyed by turning into the fields considerable numbers of common ducks. Heavy rolling, especially during the night, is in many cases destructive of slugs. Salt, and also rape powder, are pernicious to the wire worm. On many soils, the wheat crop sown after a summer fallow is never attacked by these vermin. Mr. Hillyard thinks he has escaped their ravages of late years, by ploughing his clover lays for wheat after the first year (Prac. Farm. p. 115.) And it is certain that by occasional material variations in the rotation of crops, the number of predatory insects may be very considerably reduced (by depriving the larva of their particular and essential food,) in cultivated soils.

Mr. Knight recommended the use of carbonate of ammonia for the destruction of the insects upon the pine and other plants. (Sel. Papers, p. 245.) Mr. Baldwin, in effect, does the same, when he commends the use of the steam from hot fermenting horse dung. (Prac. Direct. p. 30.) Mr. Robertson found soot (which contains ammonia,) when diffused in water, to be an excellent application. (Gard. Mag. vol. ii. p. 18.) When speaking of the use of fermenting horse dung, in the destruction of insects, Mr. Knight remarked, "I conclude the destructive agent in this case is ammoniacal gas, which Sir Humphrey Davy informed me he had found to be instantly fatal to every species of insect; and, if so, this might be obtained at a small expense by pouring a solution of crude murate of ammonia upon quick-lime; the stable or cow house would afford an equally efficient, though less delicate fluid. The ammoniacal gas might, I conceive, be impelled by means of a pair of bellows amongst the leaves of the infected plants, in sufficient quantity to destroy animals without injuring vegetable life; and it is a very interesting question to the gardener, whether his hardy enemy, the red spider, will bear it with impunity." Ammonia seems peculiarly distasteful to insects. Carbonate of ammonia is often successfully placed in meat safes to prevent the attacks of flies.

LIME—THEORY—PRACTICE.

We copy the following letter from the *Massachusetts Ploughman*, to the editor of which it was addressed by a Yankee member of Congress, and as it treats of the practical effect of lime and of a part of Maryland for which we have ever entertained a warm feeling, we insert under the impulse of a two fold motive.

LIME—THEORY—PRACTICE.

Mr. Editor—Sir,—Your incredulity as to the benefits to be derived from the free use of lime as a manure, I cannot reconcile to the usual correctness of your opinions in regard to other matters. Your prejudice upon the subject seems to be unconquerable and I doubt not is sincere, but from the sharpness of the language which you sometimes use in discussing the matter, I am inclined to think that you may once at least, have yielded to the arguments or proof of others and have burnt your fingers with hot lime. Be this as it may, the mass of testimony of various sorts in favor of the article is so great and so far outweighs, it seems to me, the contrary proof, that you certainly must have too hastily made up your mind. Has it ever occurred to you what imparts superior value to lands in the lime-stone region of our country? to those, for instance, in the Genesee tract of New York, in Frederick county, in Maryland, and Loudon county, Virginia? Is the higher market value of the limestone lands there to be ascribed to anything else than to the circumstance of the mixture of that mineral with the soil to which it gives superior fertility: and is it not especially to be attributed to the superior quality of the herbage which the soil produces?

Within 18 or 20 miles of this city, there lies a tract of country, of limited extent, and but little generally known,

particularly in New England. It is called the Forest of Prince George's County, Maryland, and derives its name from having been originally covered with a dense growth of heavy timber. Few soils surpass this in natural fertility, and it is not doubted that this is owing to the marl with which it is mixed and underlaid.

Of this marl, lime is the principal ingredient. My travels have been pretty extensive and I have seen many rich and highly cultivated districts, but I doubt whether any in the United States excel the Forest of Prince George in these respects. Tobacco is the staple. The successful culture of this plant requires much skill. Its appearance is beautiful in all stages of its growth. The crop is obliged to be kept so clean, that it leaves the land in an excellent state for wheat, which usually follows the tobacco.

Upon the wheat, clover seed is sown in the spring and the clover is pastured the second year. The third year tobacco is planted upon a part of the clover lay, and corn upon another part.—The yield of corn is about from forty to sixty bushels an acre. The plantations are of from three hundred to two thousand acres in extent, and the planters are generally industrious, well informed and highly respectable men.

There is a family there of the name of Hill, whose possessions are very extensive and whose skill and success in planting are admirable.—They are descendants of a man of that name, who came out as a surveyor with Lord Baltimore. Mr. Charles Hill has two separate plantations in the Forest of about two thousand acres each.—One of them I visited last September, and in the course of the visit rode with him over one of his corn-fields, containing upwards of three hundred acres in one body, lying on each side of a creek or rivulet, a short distance from its entrance into the Patuxent river. This field is a perfect level, and the soil a rich black mould, blended with marl. Beneath the corn, which could not be surpassed in luxuriance, pumpkins were planted in our Yankee fashion, and it would certainly have puzzled a better guesser than I am to say how many cart loads the pumpkins would have made.

I believe that one reason why lime has not had a fair trial with you is, owing to a notion that your vicinity to the ocean neutralizes its effects. Why is it, then, that the farmers on the sea coasts of England and Scotland use it so extensively, nay, deem it so indispensable? Is there any good reason why the same causes should not produce the same effects there? This certainly deserves inquiry, if it does not require explanation.

I have my doubts whether the efficacy of lime has been fairly and fully tested in Massachusetts. The experiment, I allow, would be an expensive one, and few farmers with you could bear the loss which would result from failure. It ought, nevertheless, to be made, because, if the advantages derivable from the use of the article with you should be any thing like what are supposed to accrue from it in Great Britain, the value of your lands would be very materially augmented.

A YANKEE IN WASHINGTON.

FOREST LEAVES AS MANURE.—It is well known that the leaves of trees make a most valuable manure; but they are so light of weight that it is rather troublesome gathering them. Mr. Cadmus, of Long Island, has given us his method of collecting them, which we think is the best we have yet heard of. He takes a common dung-fork, and striking it lightly into the surface soil, when not frozen, which the leaves cover, it will easily peel from the sub-soil from one to three inches deep. As it is loosened in this way roll it over on the leaves, and as soon as a good fork full is obtained, throw it into the wagon. The leaves and top soil are thus taken up quite rapidly, and the latter weight for weight, for many purposes, is scarcely less valuable than the former. They make one of the very best manures for nurseries, orchards, and gardens. Along their sides, and particularly in the corners of fences, large quantities of decayed leaves and rich soil may be found; and we know of nothing more valuable to be mixed with manure in the barnyard, or to make a compost of with lime, ashes, charcoal-dust, and other substances.—*American Agriculturist*.

GRAVEL IN ANIMALS.

It is now more than one year since I discovered something wrong with my bull Yorkshireman, and having lost a fine ox some years ago with gravel, I was not long ignorant of what was the matter. I accordingly applied to a reg-

ular physician, who directed 1 oz. of juniper berries, 1 oz. of box leaves, and 1 oz. of pearlsh, to one gallon of water. After using four portions of that prescription in one week, I gave him several bottles of harlem oil, together with about two gallons of honey; after which I gave him 1 oz. of pearlsh daily for a considerable length of time. For several days after I commenced doctoring he was extremely bad, frequently clambering with both fore feet into his manger, then moving swiftly from one side of the stable to the other, and switching his tail furiously at the same time, appearing to use every effort to water, but frequently to no effect. Having caught his water frequently, I discovered a piece of gravel near twice the size of a grain of wheat; it appeared to have been broken off from a larger piece. By degrees he gradually got better, and I have seen but little symptoms of the complaint until a short time ago, when I again commenced using pearlsh. I have been thus particular in giving this account, in hopes if any one should have a case of the kind, they may, if they think proper, try the same course of doctoring. It is said the gravel is not always produced from the same cause, but medical men are enabled to judge of the cause by the color of the gravel.

Last spring I lost a yearling buck lamb. It was noticed for a few days to droop about, when one of my boys who had the care of them concluded that it had the gravel; but as I had never heard of an instance of the kind in sheep, I did not suspect that it was gravel. I gave it a dose of some simple medicine, when it immediately died. I examined it carefully, and as soon as I opened it discovered the neck of the bladder was burst open, and a large portion of bloody water among the intestines; but it was not until I had opened the penis with a sharp-pointed knife to the extreme end that I found the cause, which was a piece of gravel about the size of a grain of wheat. In the ox that I lost, I found two pieces of gravel in the penis wedged in alongside of each other, more than half way along it. They were as large as small-sized grains of coffee, and about the shape. Had I known previously how these two were circumstanced, I might in all probability have saved them both. I think by having a record of all such circumstances to refer to when cases of the kind occur, there would be a great advantage in it.

JOSEPH COPE.

Kirkleavington, Pa. 20th of 1st mo., 1844.

[*American Agriculturist*.]

Green and Dry Wood.—A cord of wood whilst green, is said to contain 1443 pounds of water, which would make one hogshead and two barrels. Let every farmer who hauls wood to market, remember that when he transports it green, he is carrying that weight and quantity of water on his load, which if he had suffered his wood to remain after it was cut till it was suitably seasoned he might save from the burden of his oxen or horses, or pile upon the top of it three-fourths of a cord of seasoned pine, and yet have no heavier load than the green cord alone weighed.—*Maine Cultivator*.

Cotton in India.—The following item of news, received by the late arrivals from England, will be interesting to some of our readers:—The report of the Bombay Chamber of Commerce, contained in the Indian newspapers, shows that the experiments in growing cotton have been, on the whole, successful. A specimen of Nurma cotton was pronounced to be a very fine, soft, strong, long, and clear-colored staple, which would compete with the very best American short sample cotton, could it be produced in sufficient quantity.—*Southern Cab*.

More Good Pigs.—Mr. John Parmenter, of Marlborough, has sent to this market a couple of pigs nine months and four day old—the weight of one was 385, and of the other 362. We are told that these pigs never sucked more than once, and were brought up by hand. Such pork will bring 6 1-4 cents per pound.—*Mass. Ploughman*.

A Foreign Pig.—Wm. Stickney of this city has just imported a pig from England of the Suffolk breed. On his invitation we examined him on board the *Minerva*, near the end of Long Wharf. The pig is a very fine one, 3 or 4 months old. It much resembles the Mackay breed. Mr. S. sent for two, but one lost its life by some means or other.—*Mass. Ploughman*.

THE AMERICAN FARMER.

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VEGETABLE PHYSIOLOGY—USE OF LIME, ASHES, PLASTER, &c.

[Observations on Vegetable and Animal Physiology, by William L. Wight, M. D. Petersburg: Laurens Wallaz, Printer, 1843.]

We have been obligingly favored with a pamphlet copy of 36 pages, bearing the above title, which we have read with intense interest, and particularly that portion of it which treats of *Vegetable Physiology*. It is written throughout with great force of reasoning, propriety of thought, clearness of diction, and proves, by its ability, that its author has a thorough knowledge of the subjects upon which he treats—a knowledge gained by experiments, acute observation, and a well trained and philosophic mind.

As every husbandman is immediately and deeply interested in the subject of vegetable physiology—those laws which govern the growth of the whole vegetable family—we shall endeavor to give an abstract of the author's views, in order that our readers may obtain an intelligible insight of them.

After a developement of the phenomena and principles involved in the growth of plants, and the effect and offices of manures, light, &c. he remarks, that it does appear that the office which oxygen fulfils in the process of vegetation is the renewal at night of the pure green, which is modified during the day by the assimilation of carbon. According to this view, the process of respiration in plants is performed at night, that of digestion by day—or in other words, that they feed at night and digest their food through the day, and as we presume, he believes that the stimulus of *light* is essential to enable the digestive organs of plants to perform their offices.

From the facts presented by Dr. Wight, he infers that the food of plants, consisting mainly, as far as ascertained, of water holding carbonic acid in solution, is derived in part by their roots from the soil, and in part by their leaves from the atmosphere. It is, however, a well ascertained law, that no food is adapted to the purposes of life until it has been resolved into its original elements. This decomposition, this conversion of food into nourishment, is effected by leaves through the agency of light, and the activity of the process is governed by the aptitude of the plant to reflect one particular ray of this light—the green ray. But, as he contends, it is clear this aptitude must arise from a particular constitution of the reflecting body; and this modification is effected by night by the elements of which the atmosphere is essentially composed—that such is the part which the atmosphere performs in the process of vegetation at night, a part equally essential with that it performs during the day, but of a wholly different and even opposite character. But whether this inference be correct or not, still it appears that the carbonate of lime, ashes, plaster, &c. have the power of imparting this constitution, and the knowledge of this fact is sufficient for all practical purposes. We cannot know why these substances dispose plants to reflect the green rather than any other color. We cannot know why the reflection of this color determines the more active decomposition of carbonic acid. Neither can we know why the perfection of vegetation and the healthfulness of the air we breathe are constantly conjoined with the completion of this chemical change. But observation and experience, the only true sources of all knowledge of nature, appear to teach us that such is the relation, such the succession of events, and that these events are invariable in their occurrence.

Dr. Wight contends that, admitting the accuracy of the foregoing observations and the experiments he details in the preceding part of his essay, the arrangements of mat-

ter connected with the growth and nutrition of plants will receive a consistent explanation on the electro-mechanical theory of Sir Humphrey Davy. Thus it is conceived that, by the union of the oxygen and nitrogen gases of the atmosphere at night with the other elements of the plant, an aptitude is given to reflect the purely green ray of solar light—or a similar disposition may be imparted artificially by the application to the soil of the alkaline carbonates or salts of lime. On the return of day this function of the leaves ceases. The carbonic acid taken up by the roots is now transmitted to the leaves. By contact the electric equilibrium of these two substances, the acid and the alkali is disturbed, but only for a moment. The equilibrium is no sooner restored, than it is again disturbed by the influence of a surface of greater intensity than that by which they are held together, viz., the green or chemical ray of solar light. Hence the elements of the compound are disunited, the oxygen disengaged, and the carbon retained for the nutritive purposes of the plant. Such are the phenomena exhibited by plants of the nutritive class on soils free from all superfluous moisture. On the contrary, where plants of this species are cultivated on soils containing water in excessive proportion as a constituent part, the same combinations occur, and the same decompositions ensue, but as they do not reflect the purely green or chemical ray, or in other words, are exposed to surfaces of less intensity, their chemical changes are effected with diminished activity; and hence the difference in the value of their products and in the purity of the incumbent atmosphere under such circumstances.

According to the above view, Dr. Wight maintains, that the absorption of oxygen gas at night, which appears to be opposed to the purifying tendency of growing plants, is absolutely essential to the intended result; thus affording a beautiful instance of the mutual and essential dependence of two opposite adjustments. The fact, moreover that plants assume a fainter tint than natural only under the influence of a disturbing force, relatively considered, reconciles another apparent inconsistency, with the harmony of all the other known operations of nature.

Dr. Wight deduces the following practical rules from the foregoing:

1st. That, as the growth and nourishment of plants appear to be alike dependent upon the product of the decomposition of organic or animal and vegetable matters, and upon those inorganic substances which increase their action upon the light, we are thus admonished of the necessity, the absolute necessity, of periodically returning to the soil an amount of both these elements corresponding with that which was taken from it by cropping. If neither be returned, the soil must and will deteriorate because plants will thus be deprived of the means by which they live and grow. If one of these elements of vegetable matters alone be restored, the productive power of plants will not be developed to the extent of which they are susceptible; both are essential. To the corruption of decayed plants the leaven of the salts must be added to give rise to forms of the highest beauty and usefulness. The superiority of animal and putrescent manures, as they are termed, over those of vegetable origin, is owing, it is believed, solely to the alkaline salts which the former contains. But, as in these the ammoniacal or volatile salts predominate, their effects are necessarily transient; and hence the utility and economy of using those of a more fixed character, as *lime* and *ashes*. In the decision of the question as to the quantity of the alkalis to be applied to the soil, it has never been considered that their direct and indirect effect should be kept entirely distinct. In the former case, this question, it would seem, ought to be determined by their solubility. It is well known that plants can take up nothing except in the form of solution, and we have abundant evidence going to show that the effects of fifty or a hundred bushels of lime or ashes, applied to

an acre of land, have been distinctly visible for an equal number of years. Hence it would appear, that the quantity of rain which falls upon an acre of land annually is not adequate to dissolve more than a bushel of these substances. If more were dissolved, plants would certainly take up a larger quantity, and the effects would necessarily be less permanent. If then, this mode of reasoning be correct, a bushel of lime, or ashes, or plaster, will be fully sufficient for the attainment of their direct influence. To secure their indirect benefits in loosening the soil, and rendering it more permeable to atmospheric influences, thus alleviating human toil, a much larger quantity will be required.

Is the question here asked, says Dr. Wight, whence is the magical influence of plaster compared with the other salts of lime, if they all act upon the same general principle? The answer, he thinks, seems to be that it is referrible to its greater power of increasing the action of bodies upon the light. Thus the experiments of Sir Isaac Newton have shown that bodies of an unctuous or sulphureous nature have a greater relative refractive power than others, or than their densities would indicate. Plaster is a sulphate of lime, consisting of sulphur, oxygen and lime. May we not hence infer that it is the subtle influence of the sulphureous principle upon that all important agent, *light*, which enables plaster to produce an effect apparently so disproportioned to the cause. Even admitting with the professor Leibig, that on the application of gypsum, a double decomposition ensues, whence results carbonate of lime and sulphate of ammonia, it may still be the sulphureous principle to which the peculiar action of gypsum is to be ascribed. Consistently, says Dr. W., with this view, the acknowledged pre-eminence of plaster and clover, in the rapid improvement of land, may be explained by the superior refractive power of the former acting through an appropriate medium in the broad leaf of the latter. Hence it is, also, that the powers are still more conspicuous in the tobacco plant and in the pumpkin vine; its apparent beneficial influence being proportionate to the extent of surface through which it is exerted. Again, without the aid of those substances which increase the action of plants upon the light, the broad-leaved may be supposed to be less adapted to purposes of profit and improvement than those with narrow leaves, since in the operations of nature a constant and close relation obtains between the size and structure of the leaf, and the amount of these elements in the soil. Thus when a piece of land has been improved by judicious culture, and left to recover by its own natural resources, it invariably clothes itself with a growth remarkable for its narrow leaves. The pine presents us with a familiar illustration of nature's mode of adaptation of plants to soils, and conveys to us at the same time another lesson for imitation in returning good for evil. From a review of the above facts, it would appear that the power of plants to absorb nutriment from the atmosphere depends directly upon the greenness, and indirectly upon the extent of the surface exposed to the action of light. Hence it follows that, in soils not calcareous, the narrow leaved plants will absorb more carbonic acid, and assimilate more carbon than the broad leaved, in virtue of their greater aptitude under such circumstances of reflecting the purely green or chemical ray of solar light.

Secondly—The essential elements of fertility, organic matters and the salts of lime, having been supplied, the next object will be to counteract the operation of antagonist processes. Of these the chief are the presence of plants other than the proper occupants of the soil, and a constant excess of water. The remedy for the first is thorough cultivation, and for the second thorough draining. By thorough draining is meant the Deanston or furrow system, which has conferred such distinction on the husbandry of Scotland.

The two preceding rules appear to comprehend the distinguishing features of the new or improved system of husbandry. These are, 1st, the *alternation of crops*, or the introduction of the artificial grasses and of root culture into the system as food for stock, and to be ploughed into the land, the ultimate object being to replenish the soil, in the most economical manner with the food of plants, with manures. 2d. *Draining* and the application of marl, lime, ashes, plaster, &c. The removal of superfluous moisture, and the application of the alkaline earths and salts are classed together, because their action in the process of vegetable nutrition is conceived to be identical—both of them enabling plants to attract more food from the atmosphere, and also to adapt it more completely to their wants. This two-fold purpose they effect by promoting the formation of the green substances which we know to be so essential to the health, and vigor and beauty of the vegetable creation.

LEGISLATIVE AGRICULTURAL CONVERSATIONS.

We present to our readers to-day the *fourth* Conversation held by the members of the Massachusetts Legislature upon Agricultural subjects, during their present session, which will be found highly interesting, for what can be more so to a husbandman than the "*management of Stock*." For the *Report* of this conversation, we are indebted to that sterling old Agricultural paper "*The New England Farmer*."

Fourth Agricultural Meeting at the State House—Jan. 30.

The subject under discussion was "*The Management of Stock, as relates to the general care and feeding*."

Hon. Josiah Quincy, Jr. occupied the chair. The meeting was not so fully attended as was the previous ones, occasioned, no doubt, by the very severe weather.

Mr. Cole, of the Cultivator, commenced the discussion, and occupied about thirty minutes. His remarks opened a wide field, embracing many subjects which would afford abundant matter for many evenings' consideration. He considered the subject a fruitful one, and could only glance at some few particulars connected with it. And first, of neat stock. The ox, he thought of more importance to the farmer than any other animal; he was far more useful and necessary than the horse, notwithstanding he is not so swift. The horse better subserves the pleasure of man, but the ox was valuable for his great strength, as well as for other good properties in which the horse is deficient. One great objection to the ox was his slow movement, which he thought might be in a measure ascribed to his training: that he might be educated to travel much faster. In England, and in this country, the ox was accustomed to travel very slow; but in Africa he would move at the rate of from three to five miles per hour, with ease. He was also very sagacious, and could be trained like a shepherd's dog.

He then spoke of raising calves, in which he had some experience. He said it was the general practice to let them suck until the time of weaning, but he thought it better to feed them with porridge made with skimmed milk thickened with Indian meal, which he thought better than new milk. On weaning calves that are permitted to suck the cow, they are apt to fall off, and do not recover till fall; but when fed on porridge, the change to grass does not affect them so injuriously. They should be fed with clover and grass as soon as they are disposed to eat green food. In some few cases, calves thus treated might be troubled with the scours, but this would be cured or prevented by giving them fresh earth, lime or chalk; rennet was also very good when put in their food. Some make use of food made of flaxseed, by taking one quart of flaxseed and six quarts of water, which forms a jelly, and give them without milk. He said one farmer in England, raised 55 calves in this way, and all did well: the expense of flaxseed to each calf was only about 18 cents. Whey has also been used with success instead of skimmed milk.

In wintering calves, more attention is requisite the first winter than those succeeding, and more care is necessary to keep them in good condition. They should have good coarse hay and roots, and he recommended the practice

of keeping them with sheep. The sheep will eat the fine part of the hay, while the calves will pick out the coarse, and they will not be endangered in their company as they will be when permitted to run among the larger cattle; nor will they be troubled with lice, as the wool of sheep is offensive to these vermin.

Cattle should be kept warm in the winter: it is essential to their comfort, health, and thrift, especially for milch cows, and a great saving of food, as every observing farmer well knows. Cattle will eat more fodder in very cold weather: in case of a sudden change to warm, they will not eat more than four-fifths they did before the change. He thought the best method was to have a cellar under the barn, but not an open one, or if it was, there should be a double floor under the cattle. It had been found by experience that a tight barn would keep hay best. The cow-house should be kept so tight that water would hardly freeze in it. He would not have cattle kept continually in a warm barn, but turn them out every day for air and exercise, in the morning and evening: the house should be so constructed that fresh air could be freely admitted when necessary, as it is injurious to all animals to breathe impure air.

As to watering cattle, various modes were practiced: some turn them out at ten o'clock, and then again at night, to drink; but this he thought a bad practice, as by remaining 17 or 18 hours without drink, they become exceedingly thirsty, and would take so much as to injure them, and make them more susceptible of the cold. He thought it a good plan to carry a little water to them after they had eaten their supper in the evening: they should also be turned out to drink in the morning after they have eaten a part of their breakfast, and then tied up again.

In feeding, there were some that practiced the course of giving a constant supply, or give it whenever they were disposed to eat; but he thought it a better practice to feed twice in the morning and twice at night, with some coarse fodder at noon.

As to cutting fodder, most persons considered it a good plan, as in this way much coarse fodder can be worked up, which would otherwise be lost, and very few object to this mode. Mr. Bloodgood, of New York, kept 20 horses six months on cut feed at two-thirds the cost when kept on uncut the same time. Mr. Sheldon, of Beverly, in keeping a stock of 51 head of cattle, considered that 600 lbs. of cut fodder was equal to 1000 lbs. uncut; that he made a great gain in the quantity of milk: from 25 cows at the rate of 6 gallons per day.

Most farmers find it profitable to feed out roots of various kinds to their stock, which are found conducive to their health. He knew of two horses kept on ruta baga and stubble, without grain, that worked every day and kept in good condition. Roots were considered good for cows, particularly when in milk.

As to cooking food for cattle, he thought there was but little advantage to be derived from it. The corn fed to cattle he thought it advisable to grind up with the cob, as being lighter and more economical than when shelled and ground without the cob.

When cattle are fed on green food, they require more salt than when kept on hay. Some put too much salt on their hay, which though greedily devoured by the animals, was injurious. Salt should be so placed that it may at all times be accessible to the cattle.

Corn fodder, whether green or dry, he considered as very valuable, and good for milch cows.

In soiling cattle, a cow may be kept on one-half acre of land, while it would take three or more acres to pasture one. A Mr. Gowen, near Philadelphia, kept 20 cows on 3 or 4 acres, about four months, until they were turned into the mowing.

In constructing stables for horses, it is important that the stalls should be so suited as to afford them pure air: the stables generally are built without any regard to this important consideration. He thought the horses' heads should, when tied up, be towards the barn floor; that they should not be permitted to stand on a floor, but on earth tan, as floors are bad for their feet.

As to sheep, they should be pastured on high lands. He thought it was not necessary that there should be water in the pasture for them, as they fed in the morning when the dew was on. It was, however, necessary that they should have water in the winter.

Mr. Robbins inquired how old a calf should be when taken from the cow?

Mr. Cole replied that they should be taken away when

two days old, and be fed with milk from the cow, then with porridge for six or eight days, when clover and grass might be gradually given: pure earth, mixed with ashes or salt, should be given to prevent the scours.

Mr. Dodge said that in undertaking to educate calves, he found some difficulty in learning them to drink milk, until a hired man in his employ, from the country, told of a way he had been accustomed to, which was, to have a leather cot in the shape of a teat, which they will readily suck, which might be fastened to the bottom of the trough in which their food is deposited. Mr. Dodge had brought them up with skim with very little new milk, and they thrived very well upon it. The calves would take hold of the cot when one day old.

He had much difficulty with his cows in calving time, and had sometimes lost a cow in the spring: they would lose their weathers, take cold and die. He supposed the trouble might be attributed partly to a cold barnyard, for since he put up a shed protecting the yard from the cutting winds, he had been more successful.

Mr. Child, of Conway, inquired how cattle could be made to eat the whole of the stubs of corn stalks.

Mr. Cole replied that if the stalks were large, they can be cut with a machine, so that the greater part would be consumed.

Mr. Merriam, of Auburn, stated that his mode of proceeding in raising calves, did not vary essentially from that of the gentleman who first spoke. His method was to take the calf from the cow when two or three days old. He had no difficulty in learning them to drink: first he gave new milk, then porridge made of skim milk, and sometimes fed them with whey. He then fed them with Indian meal, and afterwards on fine hay, then he let them pick their own feed; he also gave them bran, with a proportion of salt. In this way his calves always did well; and in the fall they looked well and made good cattle. He found this plan better than any other. The first year he put them with the sheep—in winter he fed them on corn fodder, &c, and in spring on beans, peas, &c. With regard to oxen, he kept them on hay, summer and winter. He had not been in the habit of cutting fodder till this winter; his horses ate too much, and he found that by cutting the fodder he saved much. He cut all his feed for his stock, excepting for his sheep and calves. With his cut feed he mixes in his meal (corn and cob ground together) at the rate of three quarts each for his oxen, and one pint for his cows per day; and to his young cattle nothing but dry feed. In this way he works up all his straw and corn fodder. He also spoke about keeping cattle warm in winter, which he considered a most important point, he litters his cattle every night with straw which keeps them in good order: his barn is warm, the boards matched and painted, with a cellar under it. Sheep would live without water, but it was infinitely better that they should have it. Mr. Merriam spoke of the caution which farmers should exercise in letting their cattle drink stagnant water from pools, &c., which are to be found in fields—and alluded to the death of a fine colt, which was occasioned by his drinking impure and stagnant water. He was in the habit of salting part of his hay, but not to a greater extent than his cattle needed; he also put salt with hay, which was carried into the barn in bad condition. As to roots, he raised some, and fed his cattle on them in the spring; he did not give them to cows before calving, but after calving he allowed them to have them. He let his calves go with the sheep—did not confine them, but let them go in and out where they pleased; he also allowed them to drink when they pleased.

Mr. Graves, of Deerfield, said he had listened with interest to the remarks which had been made; he had some experience in raising calves, and his practice varied but little from those who had spoken upon the subject. He takes the calves directly from the mother, lets them know nothing about sucking, and finds that by doing so there is less difficulty in learning them to drink milk. He gives his calves new milk two or three weeks, then skim milk, and soon as they will bear it, meal. Rye meal is the best, which should not be bolted; they are not liable to scour when thus treated, and do better than when they are permitted to suck. When six months old they are in better condition than when fed in the usual way. The first winter he gave them oats in the sheaf chopped up. If he had no oats he gave a little meal every day through the winter with good hay.

Hon. Mr. Allen, of Pembroke, remarked, that he differed a little from the gentleman on the subject of raising calves. He was a child of nature, and loved to follow

her and let his calves be with their dam. When the calf is able to take all the milk he should be turned into the pasture with the cow, and will learn from her how to eat in the pasture and drink too. In three months he suffered them to run with the cattle that were fattening, and found no difficulty in their wintering well.

As to keeping calves very warm, said he must differ from some of the speakers. He thought it important that cattle should be exposed as well as man. Calves want air, they are not apt to suffer with cold, if they have liberty to go under a shed. He remarked that if he should be kept in this house for a few months, by a long session, when he returned home to his farm, should be very unfit to face a northwester: he could not endure the change—but should wilt down under the influence of it.

Mr. Stone, of Beverly, remarked that it was a settled axiom now since the science of agriculture was more understood, that no man could be a good farmer who did not keep a plenty of stock; for, without stock, there could be no manure, and without manure there could be no crop; and if but little produce, the receipts must necessarily be small. He thought it advisable for every farmer to keep more stock than they generally do. Of the variety of stock to be kept on a place, every farmer must be his own judge: a fair proportion, however, he thought should be swine. The fashions were continually changing. All abstinence from labor was formerly considered by some, as a criterion of a gentleman. Dr. Franklin's negro servant remarked, after his return from England with his master, that "the hog was the only gentleman there; for man works, horse works, the ox works—all works but the hog: he eat, he drink, he sleep—he no work; he lib like a gentleman." Mr. Stone remarked that there was a great improvement in swine as well as in men since that time. It was now no mark of a gentleman to be idle, and the same feeling seemed to be infused into the swine, as they did their part of the farm work, and their services were highly useful and important as agents in decomposing manures.

He thought it was better to have water from a running stream brought into the barn-yard for the benefit of the cattle, than to be obliged to keep the boys from school to drive them to the brook. When cattle do not have access to water in the yard, they will oftentimes drink so much as to injure them when driven to it after long abstinence. He recommended to put hot water in the watering tub in very cold weather for milch cows, to take the chill from the water. As to food for cattle they were fond of a variety; should have corn-fodder, roots, hay, &c. New milch cows should be learned to drink swill from the kitchen: that in his experience it greatly increased the milk, and was more profitable for them than swine. As to raising calves, he coincided with much that had been stated, but in his neighborhood they have a value for the market. Good veal was an important article, and the great object was to give it a delicate complexion and fine flavor, which was affected by the calves sucking the cow, and being tied up in a pen, and kept comfortable with straw; for if much exercised by running with the dam, the veal will be red, tough, and unsaleable. He remarked, that in case a farmer should lose one of his oxen, as is sometimes the case, his mate could be trained to work single, like a horse. Bulls can also be trained in the same way, and answer all the purposes of a horse. He said carrots were much used in his neighborhood for horses; that they thrive better on them than when fed on grain.

Mr. Smith, of South Hadley, thought Mr. Stone's practice of feeding on slops, better in theory than in practice, and asked the gentleman how large a family must a man have to make slops for a dozen cows? He thought it would cost more than the milk was worth.

As to raising calves, he thought there was some risk in feeding with meal, for if too much is given they will scour. He takes his calves from the cows at three days old. He feeds them three times a day with what is called bonny-clabber, or sour milk. He said a neighbor of his found it impossible at first to make his calf drink this; but he determined he should drink it or starve. He made a second offer at noon, but it was refused: at night, the calf was glad to drink the whole, and it seemed as if he would take pail and all. Calves should by all means be kept well the first year. He liked the plan of keeping them with sheep, but they need better food, and should have a constant supply of water, living water in the cow-yard. He had aqueducts which conveyed water to his yard, which saved him more than the interest of \$500. He thought corn fodder was generally under-rated. He once kept a cow

for his hired man: he fed her principally on corn-stove as he did his own cows, in the first part of winter. His man complained, and wanted her fed on good hay, to which he acceded, but after trying it awhile, the man found the quantity of milk diminishing, and desired his cow might be fed with corn-stove. His wishes were again gratified and he soon found the quantity and quality of his milk improving.

As to salt for sheep, he said a little was good; but he knew a man who lost three-fourths of his flock one winter in consequence of eating from a load of hay that had been made very salt in order to keep it from spoiling. The whole flock was affected. He at length recollected that this load of hay had received a large quantity of salt, and removed them from it only in season to save one-fourth of his flock.

"Mr. Cole said that he wished to explain, as it seemed that he was not understood in regard to keeping cattle warm. He recommended a very warm barn, as a protection against very severe cold, and when the weather was mild, the doors should be opened and the barn ventilated, that the cattle might be supplied with pure air. As to following nature, there was not time to discuss the subject. He would barely remark that if we allow nature to take her course, we should reap a crop of weeds instead of grain. All our labors were to direct nature. We cut down the hills, and raise the valleys, build railroads, improve on nature."

[Col. S. Jaques, of the Ten Hill Farm, Charlestown, next spoke on the subject before the meeting. His remarks were highly interesting and important to the farmer. We took copious notes of what he said, for our paper, but fearing we might not do him justice, we requested him to give the substance of his speech in a communication, which he has obligingly done, with some additional remarks, interesting, we think, to our remarks.]

Before we introduce the remarks of Col. Jaques we will add that he is one of the most distinguished cattle breeders in the country; that he is the same gentleman who created the breed of cattle in Massachusetts so celebrated there as the "Cream Pot breed"—a breed of cows which took this distinctive appellation from the buttery quality of their milk. Having stated this fact we need not add that the opinion of such a gentleman is entitled to high consideration and respect:

COL. JAQUES' REMARKS AT THE FOURTH AGRICULTURAL MEETING.

One great object of these Agricultural Meetings, is, to interchange views and opinion, and thereby gain information from each other, upon the great interests of Agriculture. I shall therefore, confine my remarks mostly to my own practice.

On the subject of rearing calves, I differ somewhat from the mode which had been presented by the gentlemen who have preceded me. To make the most of my calves, I allow them to suck the cow for the first three or four months. Calves dropped in the Spring, I keep in the stable, the first summer, leading them to the cows morning and evening; by this means I obtain better forms, broader loins and hips, with fuller bosoms; giving greater weight to the most valuable parts. At about two months old, they would begin to eat hay and drink water; and at four months, would feed so well, that if then taken from the cow, and well fed, there would be very little, if any, falling off in their condition. But if fed upon skim milk porridge, only, as some gentlemen state, as being their practice, and turned to pasture the first season, I think they are more inclined to be narrow in their loins and hips, and become pot-bellied; defects which they seldom wholly outgrow. It has been said that our neat stock have degenerated; no wonder, if they have been brought up upon skim milk porridge. If there is no profit in keeping animals well, there is less in keeping them poor. In wintering stock, in our climate, Cows in milk, and oxen daily worked, should have comfortable warm lodgings. Yearlings and two year olds, will sometimes do well to run out where there are convenient barn-yards, and sheds, with mangers underneath, adjacent to the barn, with a door left open. With this arrangement you will seldom find the animals in the stable. The same remark will apply to the Horse, whose limbs are badly swollen by hard driving; giving what is called a winter's run, and taken up in the spring with proper treatment, has a remarkably

good effect. Milch Cows should have a regular and kind system of treatment in their management. They should be milked at stated times, and if convenient always by the same person. When milking is commenced, it should be done with as much despatch as possible, consistent with mildness; and be sure not to stop until they are cleanly milked. I prefer milking, after they have been fed and have done eating, when in the stable. Let no movement be made to excite them, or draw off their attention from yielding down their milk; this kind of treatment will add much to the quantity of milk. Good water, easy of access at all seasons, is highly important to most of our domestic animals. For two or three of the first days after a cow calves, in cold weather, I do not allow her to have any cold water. I give her water about milk warm, with a handful of wheat bran to a pailful. For the loss of appetite of either horn cattle or horses, I give what is termed a warm mash, made as follows: two quarts of oats, two quarts of malt, and two quarts of wheat bran put in a pail, well mixed, then pour scalding water until moist, cover the pail with a cloth, let it remain until it is about milk warm, then give it. If for a horse having a cough, put in two table spoonfuls of honey. I have seldom known this mash fail of producing the desired effect. Some care should be taken that the animal does not take cold after taking the mash. If necessary three mashes may be given, missing one day between each. In November last, I had a very fine Cow, giving about twelve quarts of milk per day, very suddenly she dried up to two quarts per day; her eyes became dim, ears hung down, and she refused to eat. I was at a loss to know the cause. I thought it might be the horn ail, or garget. I split the under part of the end of her tail, took off an inch of the bone; put about a gill of spirits of turpentine in the hollow, back of the horns and about the roots of the horns, gave her half a pound of sulphur and half an ounce salt petre, put a piece of garget root in her dewlap near the bosom, as a rowell, and gave her a warm mash. In a very few days she appeared perfectly well, and gave her usual quantity of milk.

Many lives have been lost by vicious Bulls, from a want of knowledge in their management. They are very averse to having their horns handled, as indeed do all horned animals, but particularly the Bull; their horns being their weapons, they seem to consider it as an assault, if you put your hands on them; frequently passing your hand up and down under their throat to their bosom, appears very grateful to them. At the age of about six months, every Bull kept to breed from, should have a ring put into his nose. This may be easily done by making him fast in a stall, so that he may be approached in front; take a strong rope, and in the centre from a clove-hitch, throw it over his horns, drawing tight; take one part of the rope, and form a half-hitch round his nose, drawing that tight also, then make the end fast to the right, a little in front of the animal, pursue the same course with the other part of the rope, making it fast to the left, in the same manner; thus you have the Bull perfectly secure for ringing. Have a pointed iron bolt about one inch in circumference, in the form of a marlin spike, very sharp at the point; take the Bull by the nose with your left hand, with your thumb and finger, you will find between the nostrils where there is little or no gristle, pass the point of your bolt through this part, making the hole a little larger than the ring. The ring is made with a tenon and mortice, with a screw for a pin; draw your bolt from the nose, and put in your ring, put in the screw, and the job is done. By attaching a small rope or chain to the ring, the animal is easily controlled. Avoid making the rope or chain permanently fast, as he may suddenly pull back and tear out his nose. For the more perfect security, where Bulls are turned loose, they should have a leather blinder placed before their eyes.

This blinder is made in the following manner. Take a piece of oak board one inch thick, 4 inches wide, and about 20 inches long. Nail to this board a piece of pliable Cow or Horse hide upper leather, which will set close to the animal's face. Should it be necessary, side pieces may be added, also a strap and buckle to pass round the lower part of the blinder, and buckle loosely under the chin.

This method I have long practiced. I have turned out three or four vigorous Bulls at the same time, with my Cows and Oxen, and have found them very timid and harmless, even to fences. To be deprived of sight, causes the most vicious, whether man or brute, to be perfectly inoffensive.

MISCELLANY.

THE SONG OF THE SHIRT.

With fingers weary and worn,
With eyelids heavy and red,
A woman sat, in unwomanly rags,
Plying her needle and thread—
Stitch! stitch! stitch!
In poverty, hunger, and dirt,
And still, with a voice of dolorous pitch,
She sang the "Song of the Shirt!"

"Work! work! work!
While the cock is crowing aloof!
And work—work—work,
Till the stars shine through the roof!
It's oh! to be a slave
Along with the barbarous Turk,
Where woman has never a soul to save,
If this is Christian work!"

"Work—work—work,
Till the brain begins to swim;
Work—work—work,
Till the eyes are heavy and dim!
Seam, and gusset, and band,
Band, and gusset, and seam,
Till over the buttons I fall asleep,
And sew them on in a dream!"

"Oh! Men, with Sisters dear!
Oh! Men, with Mothers and Wives!
It is not linen you're wearing out,
But human creatures' lives!
Stitch—stitch—stitch,
In poverty, hunger and dirt,
Sewing at once, with a double thread,
A Shroud as well as a Shirt."

"But why do I talk of Death—
That Phantom of grisly bone,
I hardly fear his terrible shape,
It seems so like my own—
It seems so like my own
Because of the fasts I keep,
Oh, God! that bread should be so dear,
And flesh and blood so cheap!"

"Work—work—work!
My labor never flags;
And what are its wages? A bed of straw,
A crust of bread—and rags,
That shatter'd roof—and this naked floor—
A table—a broken chair—
And a wall so blank, my shadow I thank
For sometimes falling there!"

"Work—work—work!
From weary chime to chime
Work—work—work,
As prisoners work for crime!
Band, and gusset, and seam,
Seam, and gusset, and band,
Till the heart is sick, and the brain benumb'd
As well as the weary hand."

"Work—work—work,
In the dull December light,
And work—work—work,
When the weather is warm and bright—
While underneath the eaves
The brooding swallows cling,
As if to show me their sunny backs,
And twit me with the spring."

"Oh! but to breathe the breath
Of the cowslip and primrose sweet—
With the sky above my head
And the grass beneath my feet,
For only one short hour
To feel as I used to feel,
Before I knew the woes of want,
And the walk that costs a meal!"

"Oh! but for one short hour!
A respite however brief!
No blessed leisure for Love or Hope,
But only time for Grief!
A little weeping would ease my heart,
But in their briny bed
My tears must stop, for every drop
Hinders needle and thread!"

With fingers weary and worn,
With eyelids heavy and red,
A woman sat, in unwomanly rags,
Plying her needle and thread—
Stitch! stitch! stitch!
In poverty, hunger and dirt,
And still with a voice of a dolorous pitch—
Would that its tone could reach the Rich—
She sang this "Song of the Shirt!"

PUNCH.

DISCOVERY OF THE SPY-GLASS.

The first discovery of the spy-glass, in 1609, was the result of childish sport and accident. JAS. METZ, of Alameer, in Holland, saw some boys on the frozen canal adjust fragments of ice to the opposite ends of their ink horns and look through them at enlarged objects; he took the hint and formed a simple spy-

glass. Galileo Gallei, improved this into the telescope, and opened a new flood of astronomical light in the beginning of the 17th century. In the later part of the last century, Herschell enlarged the field of telescopic vision by increasing the size of the glasses, and the length of the tube. In 1824 the third enlargement of the visual orb, by object glasses of fourteen inches diameter and tubes twenty feet focal distance, unlocked again the secret chambers of the firmament, found a parallax in the star Lyra, and exhibited solar systems of stars, revolving round each other, within a limited space, by the hundred and thousand.

The inventor of this instrument was JOSEPH FRAUNHOFER, an ingenious mechanic of Munich, in Bavaria—one of those productions of nature, says Mr. Adams, which once in an age she exhibits as symbols and samples of creative power. He was born at Straubing, in Bavaria, of parents so indigent, that they could not give him the education of a common school. His father was a glazier, and destined him for his own trade; but in his eleventh year he lost both his parents, and was bound to a glass maker in Munich, by his guardian. Towards the end of his apprenticeship the house of his master fell in, and Joseph, by a special interposition of Providence, and extraordinary exertions, encouraged by the personal presence and cheering of the King of Bavaria, was drawn out uninjured from the ruin. A pecuniary gift from the compassionate King enabled him to purchase books on optics, and buy the last half year of his apprenticeship. After many disasters in his struggles, at once for knowledge and for bread, he was admitted as a partner in the establishment of Urzsehneider & Reichenbach, opticians, who soon acquired the highest reputation in all Europe. FRAUNHOFER not only succeeded in making larger object glasses than was ever attempted, but made them more perfect. In 1824 he furnished to STRUVE, for the University at Darpat, the Achromatic Refractor, afterwards still more enlarged for the Observatory at Pulkowa. There, at this hour, perhaps, is STRUVE playing his optic nerve to the detection of the firmament with an object glass of fourteen inches aperture, a tube of twenty-one feet focal distance, and a magnifying power of two thousand fold duplication.

ELEGANT EXTRACT.

The following is an extract from an oration delivered by Dr. George W. Bethune before the Literary Societies of Dickinson's College. The oration opens with the following fine passage:

"There is a story told somewhere, of one who came back, after a long absence, to the scenes of his youth. He had gone forth in early adventure to distant lands, and the hope of return had cheered his many years of foreign toil until the noon of life found him drawing near once more to the only spot that he ever could call home. His heart beat more and more quickly as the mountains around the village arose in the blue distance; then, as he saw the spire of the village church, or the well remembered trees grown old but still green; and then he entered the cheerful street. Many a dwelling was familiar, though touched by time; but among the groups about their thresholds, and those who met him on the walk, there was not a face that he knew, or that knew him. He passed on through the abodes of the living to the resting place of the dead; and there he found graven on stones, many names that were written on his soul. All whom he had hoped to meet again, were gone, or were buried, or had forgotten him. He was alone, a stranger in his early home. He paused to look around him. There stood the venerable edifice within which his young mind had been trained to learning. There was the green where he had leaped and shouted with his fellows. There flowed the little stream from the shaded spring which had so often slacked his summer thirst. He followed it to the path deep beaten in the sod. He stopped and took one long cool draught; his tears fell on the calm water's face; he lifted his hat from his head, breathed a prayer, and departed to return no more."

"With some such emotions does your orator address you now. A score of years has passed since he left, for the urgencies of mature life, these academic shades, dear from a thousand memories of happy youth. They were then populous with his friends, and their classic excitations were directed by the kind and parental solicitude of teachers to whose skill, fidelity and gratitude can never make sufficient payment. He has trodden the college walls again

to-day, and has seen within them many happy faces in the bloom of youth; but those whom he loved to greet with frank regard, are all gone. Some are in the grave; the rest widely scattered through a cold world, never to know again the buoyant happiness and careless wealth of affection that here blessed them and him. But thanks be to God! the fountain of truth at which they drank, still pours forth its living waters; the path to it is still deep beaten by youthful feet, and I have come to take one draught with you; to send up a prayer to the father of lights, who causes it to flow—and to go my way."

FORTUNATE INCIDENTS.

Evelyn was walking one day in a field near Say's Court; he stopped for a moment to look in at the window of a poor solitary thatched house, and beheld a young man carving a cartoon of Tintoret, of which he had bought a copy at Venice. Evelyn requested permission to enter, and soon recommended the youthful artist to the patronage of Charles the Second. Such, says the editor of Fraser's (London) Magazine, was the commencement of the fame of Gibbons. But for that walk, and that listening of Evelyn, he might still have pursued his solitary toil, unfriended and unknown: it was a light circumstance, a mere shadow upon the stream, but it was full of promise for his future fortunes. Tickell owed all his political prosperity to a little poem suggested by the opera of *Rosamond*. The late William Gifford was rescued from the penury and hardships of a coasting trader by the report and the sympathy of the fish-women, who saw him playing ragged and neglected upon the beach of Brixham. And what is particularly deserving of notice is, that the very circumstances which seem to portend our injury or our ruin, often promote, to an extraordinary extent, our prosperity and happiness. This apparent contradiction may be exemplified from the life of the present amiable and learned Professor Lee, whose early struggles to acquire knowledge, amid the poverty and depression of daily labor, must be well known to many of our readers. He was by trade a carpenter, and had no means of extending his knowledge of languages except by exchanging the grammar of one for that of another. But no difficulties or privations could quell the fire of his enthusiasm; his only time of study was after the conclusion of his work in the evening; still he persevered. At length he married; and the expenses of his new manner of life not only obliged him to undertake severer toil, but seemed also to call for the abandonment of his literary pursuits; his evening as well as his morning hours were to be devoted to the hammer and the saw. At this critical juncture, the chest of tools upon which he depended for subsistence, was consumed by fire, and destitution and ruin stared him in the face. His calamity proved his greatest blessing; his loss became known, attracted attention to his character, and friends were not long wanting to assist the patient and struggling scholar. But for the burning of that chest of tools, the Cambridge Professor of Hebrew might at this instant have been mending a window-frame at Bristol, instead of occupying a stall in its cathedral.

A BEAUTIFUL IDEA.—*Knowledge of Men*.—One evening there was an illumination, and we sat on one margin of the lake to take a prospect of it on the other. But I, instead of looking upon the lamps, looked into the water and up to the sky, and there stood a clear, beautiful star aloft, and immovable. In the water I saw it also, beautiful indeed, but often removed by the wind, changing its form, and not seldom dim. Suddenly the thought struck me, so it is with men, we know them, we judge them, only in the strangest, most complex, and often most unnatural relations, far away from their proper selves, in situations and in atmospheres where they are shaken, and troubled, and become dim. We look always one way—down—into some muddy pond (called *belike* History) where the real character of a man is tossed upon the waves of a vain opinion. Pityful!—look up at once into the man's face—into his soul—where God gives you opportunity.

A STRIKE.—"I ain't going to be called a printer's devil any longer—no more I ain't," exclaimed our imp the other day, in a terrible pucker.

"Well, what shall we call you?"
"Call me typographical spirit of evil, if you please—that's all."

BALTIMORE MARKET, Feb. 20.

Beef, Balt. mess,	8 1/2a	Butter, Glades, No. 1,	13a
Do. do. No. 1,	6 1/2a	Do. do.	2 7a
Do. prime,	5a	Do. do.	3 5a
Pork, mess,	11	Do. Western	2 7c
Do. No. 1	9 1/2a	Do. do.	3 5a
Do. prime	8 1/2a	Lard, Balt. kegs,	1 6 1/2a
Do. cargo,	9 1/2a	Do. do.	2 none
Bacon, hams, Ba. lb	6 1/2a	Do. Western,	1 6 1/2a
Do. middlings,	5a	Do. do.	2 5a
Do. shoulders,	4a	Do. do. bls	1 6
Do. asst'd, West.	3a	Cheese, casks,	6 1/2a
Do. hams,	3a	Do. boxes,	6 1/2a
Do. middlings,	3 1/2a	Do. extra,	10a
Do. shoulders,	2a		

COTTON—			
Virginia,	8 1/2a	Tennessee, lb.	7
Upland,	11a	Alabama,	11a
Louisiana,	11	Florida,	7a
North Carolina,	7a	Mississippi	

LUMBER—			
Georgia Flooring	12a	Joists & Siding, W.P.	7a
S. Carolina do	9a	Joists & Siding, Y.P.	7a
White Pine, pann	12a	Shingles, W.P.	2a
Common,	20a	Shingles, ced'r,	3.00a
Select Cullings,	14a	Laths, sawed,	1.25a
Common do	8a	Laths, split,	50a

MOULASSES—			
Havana, 1st qu. gl	17 1/2a	New Orleans	24a
Porto Rico,	26	Guadaloupe & Mart	26a
English Island,		Sugar House,	28a

SOAP—			
Baltimore white,	12a	North'n, br'n & yel.	3 1/2a
brown & ylle w	4 1/2a		

TOBACCO—			
Common	2a	Yellow,	8a
Brown and red,	4a	Fine yellow,	12a
Ground leaf,	6a	Virginia,	4a
Fine red	6 1/2a	Rappahannock,	3a
Wrappery, suitable		Kentucky,	13a
for segars,	8a	St. Domingo,	13a
Yellow and red,	7a	Cuba,	15a

PLASTER PARIS—			
Cargo, pr ton cash	3.12a	Ground per bbl.	1.12a

SUGARS—			
Hav. wh. 100lbs	9a	St. Croix, 100lbs	7.00a
Do. brown	a	Brazil, white,	a
Porto Rico,	6a	Do. brown,	a
New Orleans,	6a	Lump, lb. c.	

FLOUR—We quote			
Superfine How. st., from stores,	bl.	4.62a	75
Do. City Mills,			4.75
Do. Susquehanna,			
Rye, first			3.25a
Corn Meal, kiln dried, per bbl.			2.62
Do. per bhd.			a

GRAIN—			
Wheat, white, p bu	1.00	Peas, black eye,	50a
"best Pa. red	95a	Clover seed, store	6 1/2a
"ord. to pri. Md	65a	Timothy do	2a
Corn, white,	40a	Flaxseed, rough st.	1.25
"yellow Md.	44a	Chop'd Rye, 100lbs.	1.18
Rye, Md.	53a	Ship Stuff, bus.	15a
Oats, Md.	28a	Brown Stuff,	12a
Beans,	100	Shorts, bushel,	9a

FEATHERS—per lb.			
COFFEE—			
Havana,	7a	Java, lb.	10a
P. Rico & Laguay.	6 1/2a	Rio,	7a
St. Domingo,	5 1/2a	Triage,	3 1/2a
RAISINS—Malaga bunch, box,			1.80a

WOOL—			
WASHED.		UNWASHED.	
Saxony,		Saxony and Merino	
Full Merino,		Common, to 1 blood,	
3-4 blood do.		Pulled,	
1-2 do do			
1-4 and common,			
Tub washed,			

CANDLES—			
Mould, common,	9a	Sperm,	32a
Do. choice brands,	10 1/2a	Wax,	60a
Dipped,	8a		

Cattle.—There were about 109 head of Beef Cattle offered for sale at the scales to-day, of which 75 were sold. The prices paid range from \$1.62 to 2.75 per 100 lbs. on the hoof, which is equal to 3.25a.25 net.

Grain.—The few parcels of red Wheat that reach the market by wagons sell at 95a.100 cts. A sale of a cargo of Md. white Corn was made to-day at 40c. Yellow is worth 44a.45c. A sale of a cargo of Oats, afloat, to-day at 29 cents.

Tobacco.—The market last week was dull and the transactions in Maryland confined to limited parcels within the range of quotations, viz. Inferior and com. 2a.25. middling to good 4a.6, good 6.50a.8, and fine 8a.12. The rates for Ohio are as follows:—com. to middling 3a.45. good 5a.6, fine red and wrappery 6.50a.10, fine yellow 7.50a.10, and extra wrappery 11a.13. We note sales of 50 hds. Missouri at 62.75a.5, according to quality. The inspections of the week comprise 40 hds Ohio and 2 hds Kentucky.

[In our estimate of the crop of Ohio Tobacco, expected to come to market this year, mentioned in our last, we find we overstated the quantity. The proper figures would have been 10 to 15,000 hds. which we are assured will approximate closely to the quantity expected.]

WHITE TURKIES.

A few pairs of those beautiful White Turkeys, so much admired for lawns on gentlemen's estates, for sale at this office. (21)

SUPERIOR RASPBERRIES & OTHER FINE FRUIT.



The subscriber is prepared to furnish his celebrated HUISLER RASPBERRY plants at a reduced price—say at \$6 per 100 plants—they are warranted genuine, and unsurpassed by any other variety known in this country.

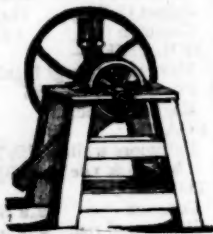
He has also a variety of GRAPE VINES of the finest kinds, raised from cuttings.

Likewise a good supply of the large Dutch red CURRANT, and a small but very superior assortment of English GOOSEBERRIES—and a general variety of ROSES, FLOWERING SHRUBS, &c.

JOS. HEUISLER,

Ross street, near the Public School.

Orders can be left with Mr. S. SANDS, at the office of the American Farmer. feb 21



GREAT IMPROVEMENT IN HUSSEY'S CORN AND COB CRUSHER.

It is believed that the Corn and Cob Crusher invented and manufactured by the subscriber in Baltimore, is taking the lead of all others. Whatever its merits may be, the machine is now pretty well known, and will still be made in its usual form, and kept for sale as heretofore.

The chief design of this advertisement is to introduce to the notice of farmers, a cheaper and in some respects a better article, which has just been completed and proved. It requires much less power, and crushes and grinds much faster than the other.

The price including extra grinders, is \$25
A machine working two sets of grinders, 35
One with three sets for water power, 45
Including extra grinders for each set, all made in a substantial manner, and warranted as advertised. As a recommendation to the late improvement a distinguished stock breeder of this vicinity assures me that it grinds faster, and with less power than my original machine, while the original is highly recommended by C. N. Bement, esq. of Three Hills Farm near Albany, N. Y.

Orders for HEMP CUTTERS and REAPING MACHINES, should be sent to the subscriber as soon as possible, so that none who design having such machines may be disappointed at harvest time.

OBED HUSSEY.

fe 21

MURRAY'S CORN & COB CRUSHERS & GRINDERS.

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for \$25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell.

fe 14

WM. MURRAY.

HORSE POWERS AND CORN CRUSHERS.

The subscriber has for sale the above implements which he can recommend to all purchasers as being SUPERIOR ARTICLES. They are made with a view to strength, durability and efficiency, possess great power, are constructed upon the very simplest principles of mathematical exactitude, and are calculated to do as much work as the largest farmer can desire, and being free from complication, are not easily put out of order, and easy of repair. For proof of their intrinsic value, the subscriber refers to the following certificate from one of our most intelligent practical farmers, who combines with a knowledge of farming that of machinery, and is every way competent to pass a correct judgment.

GEORGE PAGE, Machinist,
West Baltimore st. Baltimore.

Orders and letters of inquiry, post paid, will be promptly attended to.

feb 14

I hereby certify that I was one of the committee on Agricultural Implements and Machinery at the last fair of the Baltimore Co. Agricultural Society—that I attended the first day of examination but not the last: that after a full and fair examination of all the other machines of similar kinds, and an interchange of opinions among the judges, it was determined by a vote of 4 out of the 5 judges, to give Mr. GEORGE PAGE the first premium on his CORN and COB CRUSHER and HORSE POWER, they each being considered very superior, both in power and operation, as well as durability to any others on the ground. It was universally admitted, that the Corn and Cob Crusher could do twice as much work as any other machine of the kind on the ground—and I must confess, that I was both mortified and surprised, to find by the award of my co-judges, that they had changed their opinions after I left, and it had been agreed upon to award the above premiums to Mr. PAGE by so decided a vote as 4 to 1, that they should afterwards change that determination after I had left without consulting me is a like a matter of surprise and mortification.

ADNER LINTHICUM, Jr.

PEACH AND PEAR TREES.

The subscriber is prepared to supply Peach Trees of the choicest kinds, surpassed by none in the U. States, and of the earliest to the latest kinds, which he is enabled to sell at 15 cts. per tree for 100 trees, 12½ cents per tree, for a larger number, or 20 cts. for a less number than 100; if packed an extra charge.

He can also supply a few very choice Pear Trees at 50 cts. per tree—and in the Fall will be able to furnish any quantity required of many kinds.

Catalogues furnished on application at the Farmer office. Entire reliance may be placed on the genuineness of these trees, and of their being of the choicest kinds. ap 12 S. SANDS.

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned successors to the late firm of Bentley, Randall & Co. are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for rendering lard, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and soap making, and for many other purposes for all of which they are now in successful operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of two thirds, and in many instances fully three fourths—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, Mc Causland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf

RANDALL & CO.

MARTINEAU'S IRON HORSE-POWER IMPROVED
Made less liable to get out of order, and cheaper to repair, and at less cost than any other machine.

The above represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order as the shorest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH,
corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20 Pratt street. Baltimore, mar 31, 1841

FARM FOR SALE.

The subscriber is authorized by a gentleman, who, being engaged in other business, is not able to devote his whole time to farming, to sell the FARM on which he now resides, situated about 8 miles from Baltimore, near one of the best turnpike roads in the county, and having the advantage of a large stream of water passing through it, with a fine mill seat with a race ready dug and dam built. This farm contains 180 acres, more or less, having full proportion of wood, and about 70 acres well set in timothy. There is a large apple orchard in good condition, a young and thrifty peach orchard of select trees, which seldom fail to bear abundantly. The buildings are substantial and convenient, being a large brick Dwelling, rough cast, with portico back and front; a large stone Switzer barn, with extensive stabling below; milk house, smoke house, a wagon shed 120 feet front, corn house and granary, carriage house, with blacksmith shop. The farm is well enclosed and divided with good fences, a large portion of which are of stone.

The present proprietor has spared no expense within the last 3 or 4 years, in improving the soil by the most approved system of cultivation; 6000 bushels of lime have been judiciously distributed, within the last two years, the beneficial effects of which may be seen by the growing crops. It is estimated that from 100 to 125 tons of hay will be cut the coming season, and a much larger quantity the succeeding summer. The wheat and rye now growing has every appearance of making as fine a crop as any in the county.

The subscriber invites those inclined to secure a productive farm, situated in one of the richest districts of Baltimore county, remarkable for its healthiness, within an hour and a half's drive of the best market in the state, to visit this property and judge for themselves. To save unnecessary application, the terms are \$16,000, one-half cash, the balance on a long credit. Apply to

at the office of the American Farmer.

AYRSHIRE BULL.

For sale, a young Bull, out of imported stock, one year old this spring. Price \$70.

Any one having heifers of this breed to dispose of, might obtain a purchaser on application to S. SANDS, Farmer office.

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CORN SHELLERS, STRAW CUTTERS, PLOWS, &c.

ROBT. SINCLAIR JR. & CO. No. 60 Light street, offer for sale the following Machinery, &c. all of their own manufacture, and warranted to be made inferior to none in this country, viz:

HAND CORN SHELLERS, 3 sorts, at 15¢, 17¢ each.
Horse power do. 2 do 35¢, 45¢ each.
Cylindrical Straw Cutters, improved construction, at 28 to 47¢.
Vegetable Cutters, \$20 each.
HORSE POWERS, 75 to \$100 each.
Thrashing Machines, 40 to \$60 each.
CORN AND COB CRUSHERS, warranted to grind 25¢, 30¢ bushels per hour, \$65.

Common Straw Cutters, 5¢, 12¢ each.—Also
SELF-SHARPENING AND COMMON PLOWS—a large and general assortment, 2¢, 15¢ each—among which are the Hill Side or Level land and Subsoil Plows, which received the highest premium at the late Fairs.

PLOW AND MACHINE CASTINGS, by wholesale and retail.

Garden and Farming TOOLS.

We will also supply orders for Endless Chain Horse Powers, on the plan just introduced in this city from Ohio. The plan and simplicity of these powers justify us in saying that they are a decided improvement on powers of this description.

Nov 15, 1843.

R. SINCLAIR, Jr. & CO.

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices \$25, 30, 35, 40, 45.

Also, small MILLS, which received a certificate of merit, for \$15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Any kind of Machine, Model or Mill work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber, JAS. MURRAY, Millwright, Baltimore.

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris, for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street. P. S. CHAPPELL, or, WM. L. HOPKINS, Agent.

Jan. 3.

LIME—LIME.

The subscriber is now prepared to furnish from his depot at the City Block, Baltimore, ALUM STONE LIME of the purest description, deliverable at any point on the Chesapeake bay or its tributaries, at such prices as cannot fail to please.

He is also prepared to furnish superior building Lime at 25 cents per bushel, in hhds. or at \$1 per bbl. E. J. COOPER, City Block, Baltimore.

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TO FARMERS.

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME, and LEACHED ASHES, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage.

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WM. TREGO, Baltimore.

POUDRETTE

Of the very best quality for sale. Three barrels for \$5, or ten barrels for \$15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail, with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to

D. K. MINOH, Agent.

Jan. 3.

The price will be increased next spring.

DISSOLUTION OF CO-PARTNERSHIP.

The subscribers, Machinists, and Manufacturers of Horse Powers, Thrashing Machines, Straw Cutters, &c., trading in the name of PEIRSON & GREGG, have dissolved by mutual consent, by Jacob Peirson withdrawing from the concern. The business in its various branches will hereafter be carried on by MAHLON GREGG, who is duly authorized to settle all accounts of the late firm—and hereby solicits the patronage of the customers of the late firm and all others who may call on him in the line of his business, pledging his best exertions to give satisfaction to all.

JACOB PEIRSON,

MAHLON GREGG.

Wilmington, Dec. 9, 1843.—jan 10

WILMINGTON, Dec. 26, 1843.

Mr. MAHLON GREGG, with whom I have been formerly connected in manufacturing Agricultural Machines, having purchased my interest in the concern, I take great pleasure in recommending him as a gentleman well worthy of patronage. His untiring perseverance in the prosecution of his plans, and his ingenuity and skill, well qualify him for perfecting every thing connected with the business in which he is engaged.

Jan. 10

JACOB PEIRSON.